General Audiences

No Archive Warnings Apply

Gen

Project Hail Mary - Andy Weir
Project Hail Mary (2026)

Ryland Grace & Rocky

Ryland Grace
Rocky (Project Hail Mary)

Swimming
Injury Recovery
we'll qualify starvation as an injury
Past Starvation
Rocky POV
Post-Canon
POV First Person
English

# Enrichment

## alatarmaia4

## Summary:

The Eridians have finally gotten the water feature in Ryland's personal zoo enclosure just right (even if Rocky would like him to stop calling his dome that).

Rocky refuses to believe that humans naturally float. There is no way Ryland's entire species regularly goes into deep water for fun.

## Notes:

- Inspired by Saving Grace (https://archiveofourown.org/works/55999603) by CptnBara (http://archiveofourown.org/users/CptnBara/pseuds/CptnBara)

I read Saving Grace (https://archiveofourown.org/works/55999603/chapters/142221274) by CptnBara a while ago and immediately internalized many things into my personal fanon, including Eridians only having the "it" pronoun and rendering unknown English words in their IPA spelling, so both of those are present here because I like them and it's fun.

EDIT: re: the above, I have finally realized that I should've just checked the 'this work was inspired by another work' from the beginning XD

this just kept getting LONGER while I wrote it! I did not expect it to take this many pages! Rocky POV is just too fun to play with.

Although I'm taking the little beach from the end of the movie, this fic is written primarily based on book canon!

(See the end of the work for more notes (#work_endnotes) .)

It was normal to be nervous, I assured myself. It was the first time Grace had been strong enough to leave its rest area and go 'outside' since it had been brought to Erid's surface. But nerves didn't mean something bad was going to happen. They were just nerves.

Improvements had been made to my initial design for the atmospheric exploration suit, but it was still mostly a ball, and I had to roll along as I walked slowly at Grace's side. I'd designed a cane based on pictures Grace had found in the thinking machine, and it was leaning on cane version six so heavily that I was worried I would need to catch Grace, which would be difficult with only two arms on the ball, modeled after the hull robots of the vacuum ship Erid had built.

Technically, the hull robots were themselves modeled after earlier ground-level inventions, but these needed to be able to work in a very thin and low-pressure atmosphere, so the versions designed for a vacuum had been the best foundation to build on.

*"Thought I already got the grand tour,"* Grace said. Its voice was still too faint. Its voice was and had been getting steadily better, ever since the thrum had figured out how to synthesize the nutrients it was missing, but there was still so much *less* of it than I knew there should be. I'd been repeatedly talking to the others in charge of food about how Grace was too thin. They behaved like they didn't understand.

"I have a surprise for you," I said, and tried not to dart forward as Grace took a particularly wobbly step.

*"What kind'a surprise?"*

"One that is a surprise."

*"Singular, right?"*

"Yes, singular." Grace had been improving a lot in its listening comprehension. I'd stopped needing to modulate my grammar as much, but I tried not to introduce too many new words or unfamiliar contractions.

Grace had said that humans often made other humans close their eyes so they could be taken close to a surprise without hearing the light from it. If I told Grace to do that, it would almost certainly trip. But an Eridian would have been able to tell what was different long before Grace paused, balancing on its unsteady two feet, and said,

*"It's not hot. The water isn't boiling anymore?"*

I wiggled. That was good! Grace's hearing and its light sense could tell it from this far away what was different. "It is not!"

*"Is it frozen this time?"*

"Go hear it for yourself."

*"Go look for myself,"* Grace corrected, already walking forward again.

Erid had picked a very flat area to build a human-safe environment in, to reduce the risk of Grace falling and hurting itself, but I still didn't like the way the sand sloped and shifted under my ball as I followed Grace to the edge of the water. The artificial waves lapped steadily at the sand, making the erosion worse; despite how cold it was in Grace's environment, it wasn't cold enough for the water to freeze.

*"You got the temperature right!"* Grace wobbled to a kneeling position, close enough to the water that it could reach out and dip its fingers in. *"Wow. That's perfect."*

"Don't go too close," I said anxiously. Then I had to scold myself; Grace wasn't a baby, it knew not to go in the water.

*"I'm fine, Rocky, I know how to* ˈswɪm*."* Grace's posture changed, becoming a little less slumped. *"Hey, I could go* ˈswɪmŋ*!"*

"What does that mean? What are you doing? New word I don't understand," I harried Grace, as Grace changed how it was sitting so it could reach down to pull its lower hand coverings off.

*"I never mentioned* ˈswɪmŋ *before? It means going into water for fun. It's good for humans."*

"What? No! Do not go in the water!" I hurriedly rolled myself in front of Grace, jumping when a wave splashed against the back of my protective suit. I used the hull arms to brace myself in the sand, my own hands fisted in the controls. "That's dangerous!"

*"It's dangerous for* you," Grace said. *"You're heavy. Humans float."*

"No, low-density objects full of air float. Humans are heavy and sink!" What was Grace thinking?? Was this some kind of human thing related to how much water they needed to ingest? Was it still loopy from being so sick? "You can't drink this kind of water!" Grace had specifically said that salt water was very bad for humans, for the same reasons it was bad for Eridians.

*"Salt water is actually even easier for humans to float in. And I don't want to drink it."*

"Good, then don't go in." I prodded my ball forward like I was about to run Grace over, trying to make it back away from the artificial shore.

*"Rocky, I promise I'll float. And it's good for me,"* Grace argued. It pushed at my protective suit, but I didn't move. Because I was so much heavier in normal gravity, I told myself, not because Grace didn't have the strength. *"Going under*

*water is how humans on Earth practice for space. It makes us float like in zero-gravity. It'll be easier for me to move."*

I hesitated.

Grace badly needed exercise. We'd—not really me at all—solved the problem of nutrition, and now it needed to do enough activity—*slowly*, gradually—to help its body relearn how to move normally. And under twice as much gravity as humans were made for. If going in the water helped with the gravity problem, and made it easier for Grace to return to a human standard of normal…

Grace tried to take off its coat. "What are you doing?" Grace was always cold these days. It didn't have enough body mass back yet to stay warm.

*"I can't go in the water with clothes on. Wet clothes will make me feel cold and bad."*

Oh, good, it wanted to be naked while it did this. "No going in the water!"

*"Rocky, please?"*

I grumbled wordlessly. "What if you do sink?" I challenged Grace. "What if you get tired and need help? We can't come get you." What if I had brought Grace safely this far only to watch it suffocate from inhaling water instead of the oxygen we'd made for it?

Grace paused. I relaxed a little bit at the sign that it was actually thinking about the question. *"Okay,"* Grace said slowly, *"could you…make something to pull me back out in an emergency?"*

"Like your space suit?"

*"Yeah, like a tether! That could work. Not as well as in space, because there's so much stuff I might hit, but it could."*

I could still hear the water moving regularly, and under it the deep mechanical rumble of the wave-making machine. "If you go in, no waves," I decided instantly. *That* was absolutely too risky. Still water presented fewer problems. But Grace sighed, big and annoyed. "No waves, or else no going in the water, ever."

*"Fine, no waves."*

"I will walk you home." I wanted to put Grace back safely in its house before I went back to my own atmosphere.

*"What, I can't sit here?"*

"Absolutely not. I will talk to the team about water safety and *then* you can be near water by yourself."

Grace was still often bedridden, so it did not go back to the water on its own. Which was good, because it took I+∀ days before the dome team finished our water safety procedures *(after* I convinced everyone that yes, I was serious about putting Grace in the deep water on purpose). While lying down it told me about 'life jackets', which was a solid idea—something that made you float no matter what!—and 'life preservers'.

I told Grace it should think hard about why all the methods for it to enjoy the water involved implications that humans doing so were about to die. It told me to stop being such a worried carapace lump.

Grace brought the large blanket we'd made for it to the shore, *"to dry off when I get out."* It took off all its clothes again, and I tried not to listen to its easily-heard bones standing out from its skin while I helped it into the lightweight harness for the safety tether we'd designed. In an emergency, a network of tubing attached to the harness would inflate, bringing Grace to the surface where it could be pulled back to shore by the tether. The team had also installed a net in the water to prevent Grace from going too far from shore on accident.

I got as close to the edge as I dared, the others right behind me, tapping against the hull of my suit to listen as intently as I could while Grace scooted into the artificial lake. Already sitting down, the water washed around its hands, then up to its center mass, and Grace laughed and shoved itself deeper and off the sandy ground entirely, spreading its limbs wide.

It floated?!

"How are you floating?" I demanded, relieved beyond words, especially words that Grace would understand. Behind me the two environmental specialists who'd designed the human-safe lake were muttering to each other about publishing a study on this.

*"I told you,* ˈbɔɪ.ən.siː! *The water holds me up more than I weigh it down."* Grace flapped its limbs a little as it bobbed; the water didn't seem to be holding it up exactly the same from second to second. Was the safety harness weighing it down too much? *"Even though I weigh more in this gravity, so does the water, so it works out the same as if I were on Earth. If I were fatter I'd float even better."*

I knew 'fatter' the same way I knew 'thin' and 'skinny', now. "Good, we'll make you float better soon."

Grace laughed. *"Spreading out also helps. Watch, I can hold my breath and go under!"* It clamped a hand to the parts it breathed out of and curled into a ball, and dropped like a stone.

"GRACE!" One of the others behind me had to grab the arm of my suit with the arm on theirs, because I almost jumped into the water in a panic. Grace was almost a meter below the surface and kicking, air escaping past its hand and

drifting to the surface, compressed into bubbles by the pressure of the water that was also bearing down on Grace. One of the safety engineers rushed for the harness trigger.

Under the water, Grace kicked harder, following the bubbles towards the surface.

*"Pffaah!"* Grace came back up with a huge gasp for air right as its harness started to inflate. *"Whoa! Oh, hey, it works."*

"Grace!! Come back!" Its whole body had been underwater. How much water had gotten into its lungs?!

Grace startled, twisting to put its front towards me, bobbing up and down as the harness kept it in the oxygen atmosphere. *"Rocky? What's wrong?"* Its voice sounded normal, but I'd heard the bubbles!

"You!! You inhaled water! Come out right now!" Getting foreign bodies out of the airway was such an invasive procedure. What if Grace got an infection? How were we even going to get the water out when there were no doctors on the planet who knew how human breathing worked? What if Grace died from not being able to breathe?!

*"What? No, I didn't breathe in. Aw, dʒi:z, Rocky, I didn't mean to scare you. Here."* Grace flailed, its upper hands cupped in a way that made it push against the water faster, 'swimming' back to the shore. *"Come listen to my breathing."* Its voice was strained as it flapped around, water trying to wash over its face, stirred by its own movement. *"I promise it sounds just fine."*

I rushed in as soon as Grace was close enough, never mind the water, and leaned my whole body against the hull of my suit. Grace curled to accommodate the roundness of my suit, its center mass expanding and compressing as it breathed in and out.

I couldn't hear any water sloshing around inside. Not besides the usual overabundant human amount, anyway. Grace's 'lungs' inflated and deflated without any unusual weight tugging on them that I could hear, or mass shifting inside that shouldn't have been there. The wet rope of its harness dragged on the sand as it was wound in, to keep it from getting tangled; a few of the others were trying to persuade me to move, so Grace could come further up the shore and they could hear its breathing better.

"I heard bubbles," I insisted. I wasn't imagining things.

*"I guess I breathed out a little,"* Grace said. *"But humans are very good at keeping water out. Our eyes and mouths can shut tight. I have to hold my nose shut, though."* Its face changed, and it smacked itself with one hand a few times, then very quickly spun its head side to side. *"Nothing to be done about water getting in my ears."*

"Promise me you're not hurt," I said urgently.

*"What happens to Eridians who go underwater?"*

"They breathe in water instead of air and drown." What did Grace mean, 'shut tight'? There was no way to close my radiator slits. If there was, I would have tried to keep them closed when I went into Grace's atmosphere above Adrian. The only reason I wasn't breathing in Astrophage right now was because they were trapped inside the sealed casing of my air conditioner.

*"Okay, well, I definitely am not drowned right now,"* Grace pointed out, far too reasonably. *"Humans evolved from species that lived in the water, you know."*

"No they didn't," I said flatly, noting murmurs of agreement from the others. This was simply too absurd to believe.

*"Which of us is the science teacher? Everything on Earth lived underwater originally. Water life existed for something like millions of years before dry land life did. Anyway,"* Grace said, *"I'm not hurt. Can I go swimming again without scaring you?"*

Probably not, I wanted to say. "Prove the bubbles aren't dangerous," I said.

Grace put the breathing parts of its face in the water and blew out hard, making bubbles boil on the surface. *"There,"* it said, after leaning back and gasping in a fresh, unthreatened breath. *"Now will you deflate this harness so I can keep swimming?"*

"No."

I was outvoted. I sat in a huddle in the bottom of my suit to hear the vibrations through the ground better, and listen to Grace swim back out to where its lower hands were too short to touch the sand.

Grace was splashing around like a thrashing fish, twice as strange as any Eridian sea monster, as loud as three clutches' worth of children playing in normal, not-underwater sand. The water conducted noise so easily that—

…Oh. Wait. Grace was playing.

I hadn't seen it play in years.

We'd sometimes played games to pass the time on the ship, but we hadn't had much in the way of things to play with, or places to go for fun, so we mostly did talking games. But Grace liked tossing games, which I couldn't participate in, and would try to bounce small soft balls off of things so it could throw and catch over and over.

I still didn't like it putting its whole body underwater deliberately, but it was doing it on purpose, and every time, Grace came back up with a loud gasp and then a satisfied sigh. I kept tapping and listening closely, but I didn't yell at it to

stop. Adrian would be proud of my restraint.

I could only take so much, though. “Grace, come out, now!” I called when its heart had been pounding for a while. It needed slow exercise, not to strain itself and make its heart weak.

Grace kicked and then clawed its way back to the shallows, upper hands digging noisily into the sand below the water, panting like it was already asleep, face wide across the bottom in the way that meant human happiness. *“What is it?”*

“All the way out.” Grace was still lying in the shallows, chin nearly in the sand but lower hands stretched out towards the deeper water and floating.

*“Why? It feels nice. I’m having fun.”*

My worry smoothed out a little bit more. “Stop and breathe. Breathe in *air,”* I urgently clarified.

Grace did a slight motion with its face centered around its light sensing organs. *“Okay, I promise not to deliberately inhale sand or water instead of air.”* But I could hear its heartbeat slow down as it lay without moving, shuffling its upper hands to rest its head on them.

Grace stayed there for a long while, until the ripples from its movement had almost entirely died out and the water was still again. *“I’m tired,”* Grace said eventually, its voice fainter than before.

I had expected its energy to run out sooner than this. “Okay, we can go now.” I poked at Grace gently with one of my suit’s arms. “No sleeping in the water.”

*“I’m up, I’m up.”*

Grace shivered when it crawled out of the water, and laid down to wrap itself in the blanket by rolling over until it was stuck in a tube of fabric. *“I’ll just stay here.”*

“No, you have to go inside,” I said, exasperated. Grace was clearly cold, and while the air in its dome was temperature-regulated, its house was much easier to make warmer quickly. “Put your clothes on.”

*“They’ll get wet if I put them on now.”*

“That’s what the blanket is for!”

I bullied Grace into rubbing itself with the blanket until it agreed to put its lower hand coverings and its coat back on, and, still wrapped in the blanket, walked back to its house. A few of the team members helped carry its other clothes; the others stayed back to put away the safety harness, talking excitedly about ideas they already had to improve it. I was helping Grace keep its blanket from falling off by using one suit arm to hold it up from the back.

It was way worse at walking now than it had been on the way out. “New rule,” I said. “We stop ‘swimming’ *before* you get too tired to walk.”

Grace was evidently too tired to laugh, but I heard a small, short note that sounded close.

By the time we reached the house I and another of the team members were more or less holding Grace upright with all four combined arms, the blanket barely cushioning the metal hands of the suit arms. We took it all the way inside and into its bed, where Grace collapsed with a relieved sigh, cane clattering to the floor. I picked it up and leaned it against the wall where Grace could reach easily as the other team member made their exit, hurrying back to our own atmosphere.

*“Gonna get sand in…my sheets,”* it muttered, face stuck into its head cushion. As we’d all (except Grace) discovered, wet human skin adhered with great enthusiasm to fine-particulate sand. It was like Grace had put on a very bad and patchy carapace costume.

It spoke more unevenly, with unpredictable breaths, when it was really exhausted. We needed to make a way to transport Grace when it couldn’t walk. A ball was impractical, because it would still have to move the ball from inside… maybe something with wheels?

“I will come help you clean later,” I promised. “Are you hungry?” Once upon a time asking that would have been horrifyingly embarrassing, but that was before I became responsible for Grace’s survival. And Grace’s survival was based on its ability to eat.

*“No…”* Grace shuffled around a little, turning onto its side. *“…A little. But I’m more tired.”*

Which meant Grace didn’t want to get up to eat. I decided eating after it slept was fine, if backwards. “Do you want your clothes?” They’d been dropped in a neat pile inside the door before the others made their own exits.

Grace shook its head. *“Blanket’s fine.”*

It should have more blankets than that, but it was lying on top of the ones we’d brought down from its ship. I went to turn up the indoor heat; there was a wall monitor low enough for me to reach, but high enough to be comfortable for Grace.

*“Wish you could…do it too,”* Grace said.

I rolled back over to its bedside. “Do what?”

*“Swim. Wish you could understand,”* Grace said. *“What it’s like for me…. Some human babies learn to swim… before they learn to crawl, much less walk. I think…I think I might have.”*

I listened, standing still so I didn't make any extra noise. Grace's memories were a precious resource for it. As horrifying as that one sounded, I didn't want to ruin the moment.

*"I really like everything…you've all built for me. Please tell them."*

"I will. I already have." Grace had told me to thank everyone on the team, everyone who'd been in the thrum to help it survive, multiple times.

*"I'm glad I could come down here."* Grace gulped in a breath. *"Even if I'm too heavy."*

I didn't miss being on the ship at all. Not even my own ship. "Me, too," I whistled. Gravity was a much easier threat to deal with than the vacuum of space, lurking outside aluminum walls. "Did the water help with the gravity?"

*"…Trying to move felt…about the same."* Grace put a hand over its face. It did that to hide; if I were human, I would be able to 'see' less of it. *"But I still wanna go back…. For science."*

Oh, Grace. I wished the water had helped more. "Okay. You can go back another day," I said. "Now stop talking. I'll watch you sleep."

## Notes:

everyone likes to whump ryland, but it IS interesting to look at what his slow recovery and adjustment period on Erid might have looked like!

thanks to that one reddit post asking if humans would still float in multiple gs of gravity. I feel scientifically validated for thinking of this idea now

Close (#)